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**New data on Xantholinini from China – 18. Species from Yunnan  
(Coleoptera, Staphylinidae)  
227° contribution to the knowledge of the Staphylinidae**

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**A b s t r a c t :** *Edulia glareosa* nov.sp., *Atopolinus silvestris* nov.sp., *Atopolinus repostus* nov.sp., *Atopolinus eminens* nov.sp. from Yunnan are described; the habitus of *Erymus dalianus* BORDONI 2006 is proposed; new records of some species are listed. *Gauropterus annamensis* BORDONI 2002 is new record for China.

**K e y w o r d s :** Coleoptera, Staphylinidae, Xantholinini, *Edulia*, *Atopolinus*, new species, new records, China, Yunnan.

**Introduction**

This contribution includes the examination of abundant material collected by Michael Schülke (Berlin) in Yunnan during the month of September 2009 and sent to me for study.

In the past I have published other papers on material collected in China by his friend and colleague, with the description of numerous new species (BORDONI 2003, 2007a, 2010). In this case Schülke has done his research mainly on some mountain ranges on the border with Burma, in particular the Mao Jiao, Laobie, Goaligong, Bangma, Wuliang, Wei Bo and Xue mountains.

Areas investigated are nearly all above 2000 meters, especially in pine forests.

To provide useful informations on the habitats of the collection, I translated, in the notes, all the entries on the labels of the studied specimens.

Unless stated otherwise, all specimens were collected by Michael Schülke.

**Acronyms**

cB.....coll. Bordoni (Firenze)

cS.....coll. Schülke (Berlin).

## Material

### *Gauropterus annamensis* BORDONI 2002

**Material examined:** Yunnan, Lincang Pref., Nanding He river bank, 1108 m, 24°07'44.2"N, 100°04'32"E, Schülke 7.IX.2009, 1 ex. (cB).

**Distribution:** This species was known only from the type series (Vietnam: Annam and Kui-Chan) (BORDONI 2002). New record for China.

**Note:** The specimen was collected in "washed from gravel and sand, from roots of vegetation".

### *Liotesba malaisei* SCHEERPELTZ 1965

**Material examined:** Yunnan, Baoshan Pref., Gaoligong Shan, 78 km N Tengchong, 2000 m, 25°44'49"N, 98°33'29"E, 1.IX.2009, 1 ex. (cB).

**Distribution:** This species was known until now only for two specimens from North Birmania (Kambaiti, near Myitkyna at the border of Yunnan) and North Thailand (Mae Hong Son Province) (BORDONI 2002) and for one specimen from 65 km E Tengchong in Yunnan (BORDONI 2005).

**Note:** The specimen was collected in "cleft with creek and forest remnant, litter/soil".

### *Edulia glareosa* nov.sp. (Figs 1-3)

**Holotype** ♂: China, Yunnan, Dali Bai Aut. Pref., foothills of Diacang Shan, W Dali, 2170 m, 25°42'07"N, 100°03'00"E, 6.IX.2009 (cS); paratypes: same data, 17 exx. (cS), 17 exx. (cB); same data, 2960-2980 m, 25°41'50.9"N, 100°06'017-28.3"E, Wrase 6.IX.2009, 1 ex. (cS), 1 ex. (cB); same data, Mao Jiao Shan, W pass, 56 km NE Dali, 2362 m, 25°55'12"N, 100°39'18"E, 4.IX.2009, 1 ex. (cS); Lincang Pref., Xue Shan, 48 km N Lincang, 2070 m, 24°19'03"N, 100°07'13"E, 12.IX.2009, 1 ex. (cS).

**Description:** Length of body about 6 mm; from anterior margin of head to posterior margin of elytra: 3 mm. Similar to *Edulia anthracina* (SCHEERPELTZ 1977) from Nepal and W Bengala, but visibly larger and longer, with similar coloration but with darker and not reddened and with bluish reflections elytra, legs testaceous clear instead dark brown; antennae proportionally longer, with antennomeres less combined each other; head much elongated and narrower, sub rectangular, with sub rectilinear sides instead rounded; eyes a little larger; pronotum leaner, more elongated and narrow, not dilated before, with more pronounced anterior angles; elytra proportionally longer and wider, with scutellum evidently much larger, with more prominent and marked humeri and surface more opaque because of a more or less polygonal micro reticulation.

Tergite and sternite of male genital segment as in Figs 1-2. Aedeagus (Fig. 3) similar to that of *Edulia anthracina*, but a little bigger (0,74 mm long), with different parameres and inner sac.

**Distribution:** This species is known only from the type localities.

**Etymology:** From the Latin *glareosus*- *a-um* (gravelly), by the favourite habitat of the species.

**Note:** The species was collected in "stone and gravel pit, on loamy steep faces with moss; former stone pit, in gravel/under stones".

At the description of the genus, (BORDONI 2002) originally called *Lepta*, name later changed to *Edulia* as nomen preoccupatum (BORDONI 2007), I wrote that at least one of the two then known species [*purpurescens* (CAMERON 1926)] seems to live on the banks of rivers in the gravel and debris.

***Phacophallus japonicus* (CAMERON 1933)**

**Material examined:** Yunnan, Dali Bai Aut. Pref., 35 km N Dali, 1982 m, 26°00'57"N, 100°06'35"E, 24.VIII.2009, 2 exx. (cS), 2 exx. (cB).

**Distribution:** This species is known from Thailand, Malaysia, Laos, Vietnam, China (also Yunnan), Sumatra, Java, Bali (BORDONI 2002).

**Note:** The specimens was collected in "decaying vegetables".

***Erymus dalianus* BORDONI 2006**

**Material examined:** Yunnan, Dali Bai Aut. Pref., Mao Jiao Shan, W pass, 56 km NE Dali, 2362 m, 25°55'12"N, 100°39'18"E, 4.IX.2009, 3 exx. (cS), 2 exx. (cB).

**Distribution:** This species is know only from the region of Dali.

**Note:** The specimens was collected in "creek valley, washed from gravel bank under stones". The shape of the forebody is particularly (Fig. 4).

***Medhiama rhododendri* BORDONI 2007**

**Material examined:** Lincang Pref., Laobie Shan, Wei Bo Shan pass, 2375 m, 24°08'16"N, 99°42'53"E, Wrase 8.IX.2009, 1 ex. (cB).

**Distribution:** This species is known only from Yunnan (type series from Diqing Tibet Aut. Pref and Nujiang Lisu Aut. Pref.) (BORDONI 2007a).

**Note:** The specimen was collected in "creek valley, devast. second. decid. forest, under stones in litter".

***Atopolinus uncinatus* BORDONI 2010**

**Material examined:** Yunnan, Dali Bai Pref., Wuliang Shan, 9 km SW Weishan, 2480 m, 25°10'15.5"N, 100°14'21.8"E, 14.IX.2009, 1♂ (cS), 1♂ (cB)

**Distribution:** This species was described from the same localitie of the listed specimens.

**Note:** The specimens was collected in "scrub with (oak, alder, pine) litter and mushrooms".

***Atopolinus rubescens* BORDONI 2009**

**Material examined:** Yunnan, Lincang Pref., Xue Shan, 11 km ENE Lincang, 2510 m, 27°55'01"N, 100°11'17.7"E, 10.IX.2009, 8 exx. (cS), 6 exx. (cB); Lincang Pref., Wuliang Shan, old pass road, N pass, 2350 m, 24°45'16.4"N, 100°29'50.3"E, 16.IX.2009, 3 exx. (cS); Lincang/Dali Bai Pref., Wuliang Shan, 20 km NW Weishan, 1900 m, 25°19'58"N, 100°07'59"E, 17.IX.2009, 1 ex. (cS); Lincang Pref., Bangma Shan, 33 km SSW Lincang, 2150 m, 23°35'41"N, 100°00'27"E, 11.IX.2009, 1 ex. (cS); same data, E pass, 17 km NW Lincang, 2040 m, 23°57'31"N, 99°56'13"E, Wrase 9.IX.2009, 3 exx. (cS); same data, 9.IX.2009, 1 ex. (cB); Lincang Pref., Xue Shan, 11 km

ENE Lincang, 2530 m, 23°55'01"N, 100°11'17.5"E, 10.IX.2009, 3 exx. (cB); Baoshan Pref., Gaoligong Shan, W pass, 35 km SE Tengchong, 2100 m, 24°50'18"N, 98°45'43"E, Wrase 26-28.VIII.2009, 1 ex. (cB); same data, 22 km SE Tengchong, 2150 m, 24°51'22"N, 98°45'36"E, 28.IX.2009, 1 ex. (cB).

**Distribution:** This species was described from Yunnan (Guyong Shan, Xiaohei Shan and Gaoligong Shan) (BORDONI 2009). It is evidently well distributed in the mountane ranges of Yunnan.

**Note:** The specimens was collected in "second. pine forest with *Rhododendron*, small cleft with water, litter and mushrooms; decid. forest remnant, litter and dead wood; secondary pine forest with ferns, litter; devast. pine decid. forest, litter; devast. primary decid. forest, litter, wood and mushr.; forest remnant and tea plantation, litter, mushr., grass; creek valley, litter and flood debris".

### ***Atopolinus repostus* nov.sp. (Figs 5-8)**

**Holotype** ♂: China, Yunnan, Lincang Pref., Bagma Shan, E pass, 17 km NW Lincang, 2040 m, 23°57'31"N, 99°56'13"E, 9.IX.2009, (cS); paratypes: same data, 1 ♂ (cB); same data, Wrase 9.IX.2009, 1 ♂ (cS), 1 ♂ (cB).

**Description:** Length of body 5,7 mm; from anterior margin of head to posterior margin of elytra: 3,1 mm. Similar to *Atopolinus uncinatus* BORDONI in size and punctuation, but darker, reddish brown. Head ovoid, shaped like *A. uncinatus*. Pronotum more elongate and narrow, with dorsal series of 6-7 spots; elytra noticeably longer and wider than in *A. uncinatus*, with more pronounced humeri.

Posterior margin of the sixth visible male tergite as in Fig. 5; male genital segment as in Fig. 6, with fused pleurae and reduced tergite; sternite of the same as in Fig. 7. Aedeagus (Fig. 8) ovoid, 1,77 mm long, with asymmetric pseudoparameres; inner sac with a group of long spines at the distal pore.

**Distribution:** This species is known only for the type localitie.

**Etymology:** From the Latin *repostus* -a -um (secluded).

### ***Atopolinus silvestris* nov.sp. (Figs 9-12)**

**Holotype** ♂: China, Yunnan, Baoshan Pref., Gaoligong Shan, 65 km NNE Tengchong, 1750 m, 25°35'20"N, 98°40'21"E, 31.VIII.2009 (cS); paratypes: same data, 1 ♀ (cS); same data, Wrase 27.VIII.2009, 1 ♂ (cB).

**Description:** Length of body 7,4 mm; from anterior margin of head to posterior margin of elytra: 4 mm. Similar to *Atopolinus brachypterus* BORDONI, with similar punctuation and clear, reddish-brown coloration, with yellow legs, but larger and more robust, longer than in *A. brachypterus*. Head longer, less restricted before; eyes bigger; pronotum longer, with more oblique anterior margins and therefore with obsolete anterior angles, with sinuate sides. Elytra much longer and wider than in *A. brachypterus*, sub rectangular, with sub rectilinear and sub parallel sides, with marked anterior humeri, with punctuation equally distributed in a series near the suture, a median and a lateral, made up of a greater number of punctures than in *A. brachypterus*.

Posterior margin of the sixth visible male tergite as in Fig. 9. Male genital segment as in Fig. 10; sternite of the same as in Fig. 11. Aedeagus (Fig. 12) 1,6 mm long, with asymmetrical, partially membranous pseudoparameres; inner sac with two overlapping

and transversely cross series of large spines.

**Distribution:** This species is known only for the type localities.

**Etymology:** From the Latin *silvestris*-e (sylvan).

**Note:** The specimens were collected in "second, mixed forest, overgrown stone, debris, litter and moss".

### ***Atopolinus eminens* nov.sp. (Figs 13-18)**

**Holotype** ♂: China, Yunnan, Lincang Pref., Laobie Shan, Wei Bo Shan pass, 2370 m, 24°08'16"N, 99°42'53"E, 8.IX.2009; paratypes: same data, 4 ♀ (cS), 2 ♂, 2 ♀ (cB); Baoshan Pref., Gaoligong Shan, 78 km N Tengchong, 2000 m, 25°44'49"N, 98°33'29"E, 1.IX.2009, 1 ♂ (cB).

**Description:** Length of body 6,6 mm; from anterior margin of head to posterior margin of elytra: 3,8 mm. Similar to *Atopolinus rubescens* BORDONI for coloration, characterized by yellowish posterior margin of elytra and for the general body shape, but much smaller; head of similar shape, with eyes of equal size; pronotum narrower than in *A. rubescens*, with similar punctuation; third article of the antennae shorter than in *A. rubescens*; elytra a little more narrow than in *A. rubescens*, sub rectangular, just dilated posteriad, with coarse punctuation, placed in a smaller number of series.

Sixth visible male tergite as in Figs 13-14; 6° visible sternite as in Fig. 15; male genital segment (Fig. 16) narrow and equipped with a long posterior spine on the right pleura; sternite of the same as in Fig. 17. Aedeagus (Fig. 18), 1,7 mm long, with asymmetrical, large and partially membranous pseudoparameres; inner sac with three big and very long spines and with some smaller spines at the distal pore.

**Distribution:** This species is known only for the type localities.

**Etymology:** From the Latin *eminens*-tis (remarkable).

**Note:** The specimens were collected in "creek valley, devast. second. decid. forest, litter and moss; cleft with creek and forest remnant, litter/soil". For the shape of the male genital segment this species is similar to *Atopolinus asymmetricus* (COIFFAIT 1973) from Nepal and *A. schuelkei* BORDONI 2010 from Gaoligong Shan.

### **Acknowledgements**

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### **Zusammenfassung**

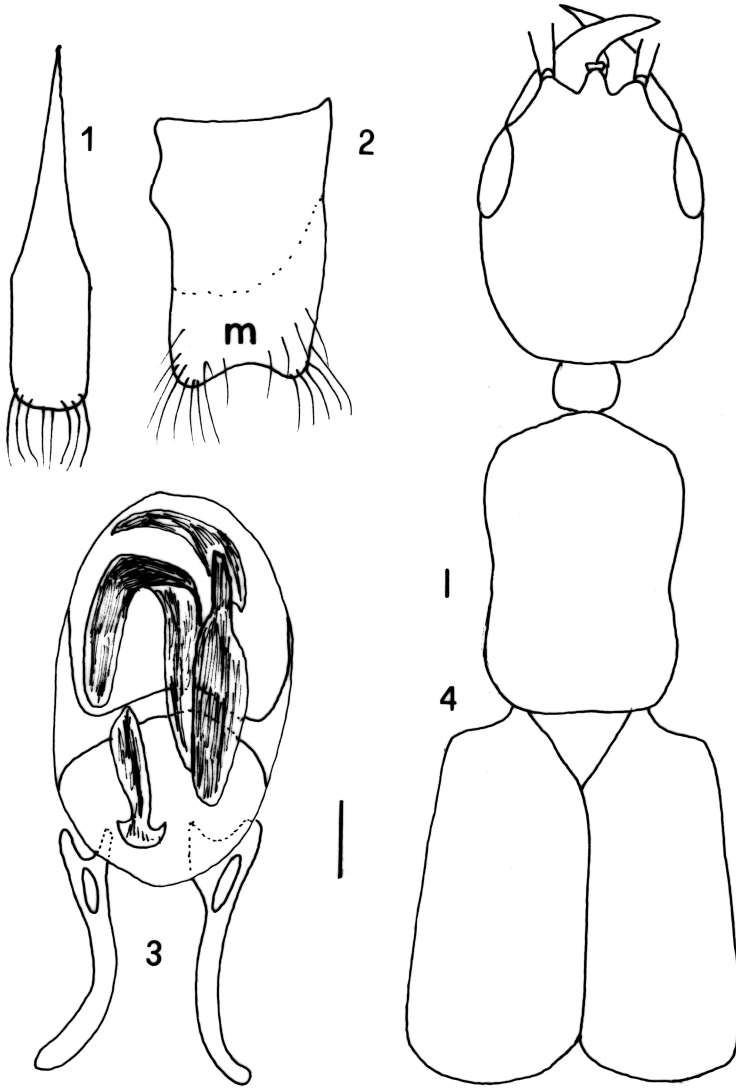
Die aus der chinesischen Provinz Yunnan stammenden Kurzflügler *Edulia glareosa* nov.sp., *Atopolinus silvestris* nov.sp., *Atopolinus repostus* nov.sp. und *Atopolinus eminens* nov.sp. (Coleoptera, Staphylinidae) werden beschrieben, für weitere Arten werden neue Nachweise angeführt, wobei *Gauropertus annamensis* BORDONI 2002 einen Erstnachweis für China darstellt.

## References

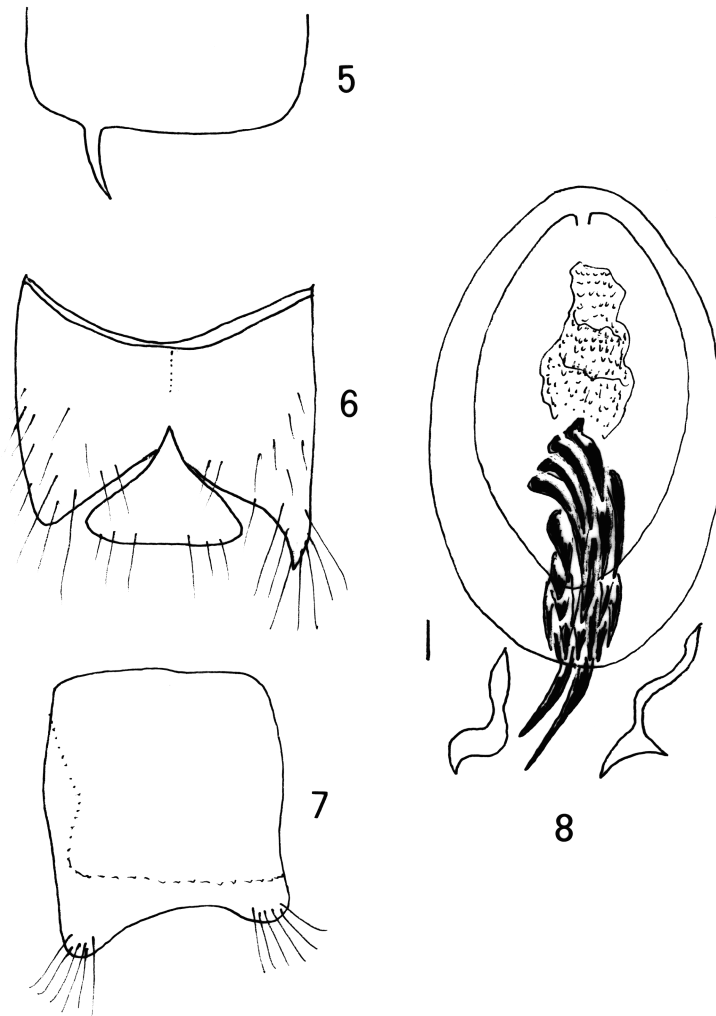
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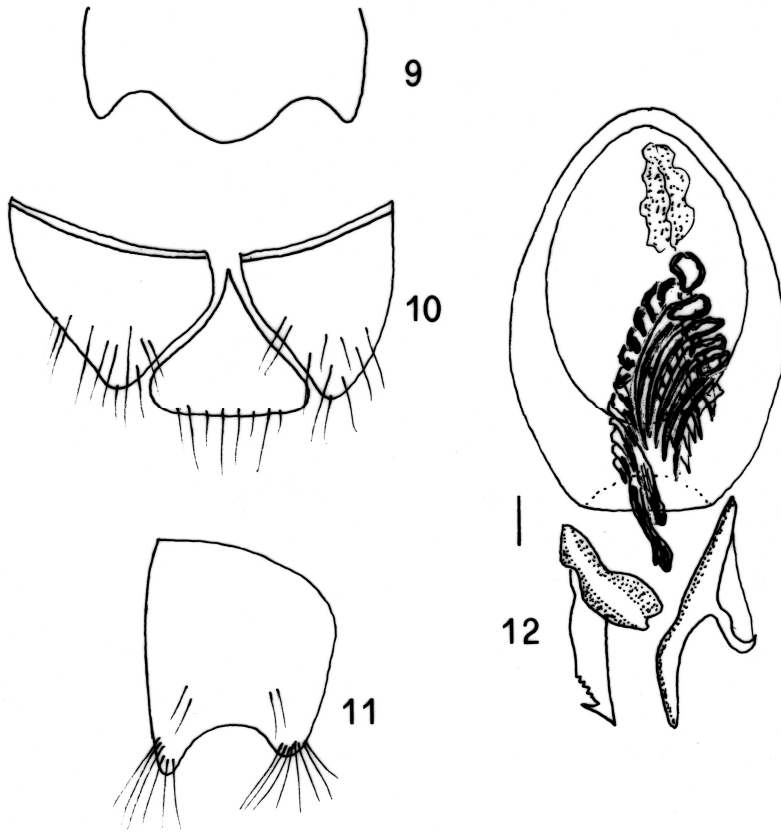
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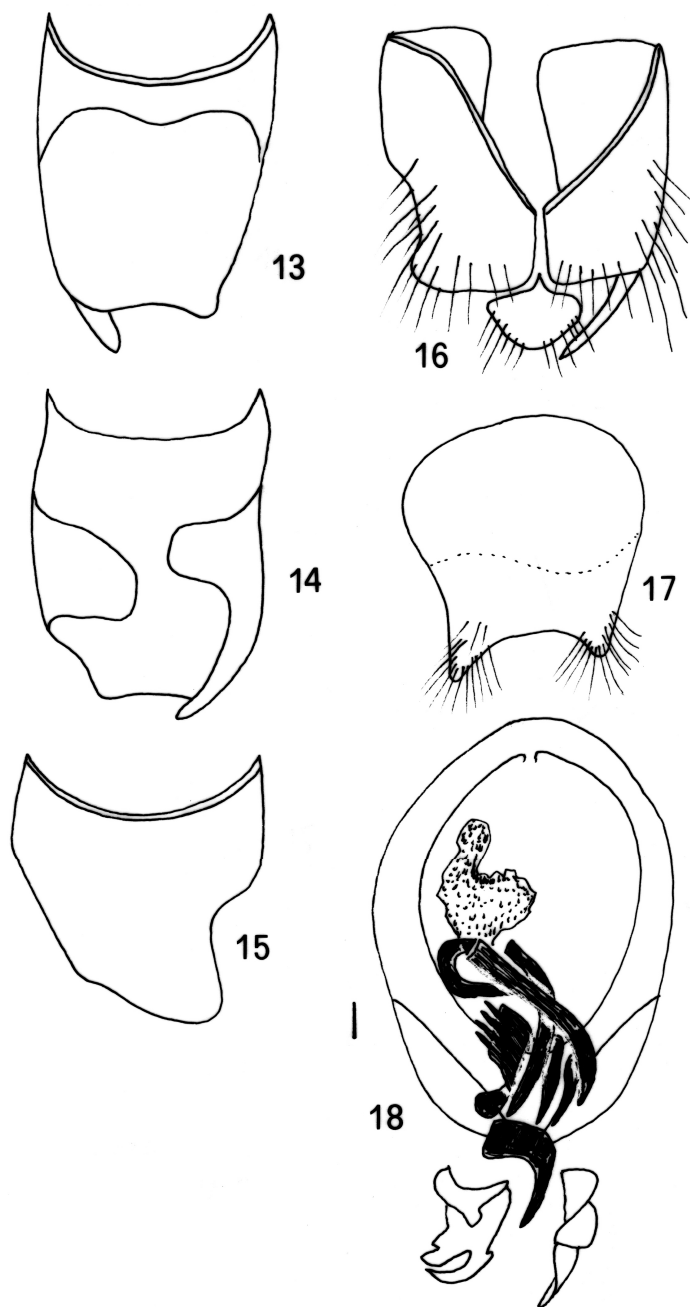
**Figs 1-4:** *Edulia glareosa* nov.sp.: tergite (1) and sternite (2) of the male genital segment; aedeagus (3); *Erymus dalianus* BORDONI: forebody (4) (bar scale: 0,1 mm).



**Figs 5-8:** *Atopolinus repostus* nov.sp.: posterior margin of the 6° visible male tergite (5); male genital segment (6); sternite of the same (7); aedeagus (8) (bar scale: 0,1 mm).



**Figs 9-12:** *Atopolinus silvestris* nov.sp.: posterior margin of the 6° visible male tergite (9); male genital segment (10); sternite of the same (11); aedeagus (12) (bar scale: 0,1 mm).



**Figs 13-18:** *Atopolinus eminens* nov.sp.: 6° visible male tergite in dorsal (13) and ventral (14) view; 6° visible male sternite (15); male genital segment (16); sternite of the same (17); aedeagus (18) (bar scale: 0,1 mm).